MEETING LOG

Directorate for Engineering Sciences

PRODUCT: Treadmills

SUBJECT: *ASTM F08.30 Fitness Products* Subcommittee Task Group (TG) Meeting on Treadmill Standards

LOCATION: Teleconference via WebEx

DATE: Friday September 23rd, 2022, 12-2pm ET

ENTRY DATE: Wednesday October 5th, 2022

LOG ENTRY SOURCE: Susan M. Bowley, Ph.D. Mechanical and Biomedical Engineer, ASTM F08.30 CPSC Technical Representative

COMMISSION ATTENDEES: Susan M. Bowley, Ph.D., Mechanical & Biomedical Engineer ESMC; Caroleene Paul DD ESMC; Tim Smith, ESHF.

NON-COMMISSION ATTENDEES: Contact ASTM for a complete list of attendees

MEETING SUMMARY:

TG chair began by walking through the draft treadmill specification document, as it appeared at the conclusion of the prior meeting. The chair then reviewed proposed updates to the document, and discussed changes related to adding new figures and updates to language.

TG chair reviewed proposed updates to the treadmill test method document. TG discussed changes to test speeds and members asserted testing finger probes at maximum treadmill speed could not be done safely. CPSC staff indicated they had done these tests without any safety issues by use of an insertion pole.

TG chair reviewed the CPSC letter emailed to him on 9/22/22. Attendees discussed use of additional finger probe and if there are injuries to support the size. CPSC staff suggested the TG focus on the problem to be solved first—specifically, the pull-under and entrapment hazards at the rear of the treadmill—and then discuss specifics of which probes or other test devices to use for testing. TG members stated it was impossible to design a treadmill that will be safe for babies, and the TG should therefore focus on warnings. Attendees discussed hazards related to children versus objects, with some attendees stating that treadmills cannot be designed to prevent access by every object that might be in the environment. CPSC staff reiterated that objects must be considered, since they contribute to the pull-under hazard and that objects only refer to deformable objects such as inflatable balls and stuffed toys, as noted in incidents.

Attendee requested to see photos or videos of the CPSC proof of concept (POC) designs noted in the letter and CPSC staff indicated it would provide in the future. TG members stated the CPSC POC breakaway design would stop the treadmill too abruptly and pose a safety hazard. CPSC staff recommended the stop should be like pulling the emergency stop cord. CPSC staff clarified that staff would prefer the TG provide performance requirements instead of focusing on determining a probe/test device.

TG secretary discussed the use of a “tricycle” probe (5-inch diameter, non-deformable sphere as front tire) to be used as a probe for testing pull-under at the rear roller. Attendees discussed use of this system and how it would behave during testing with respect to the location of maximum pull-under force on rear-roller, the speeds to be tested, and the use of a hard/non-deformable sphere instead of a deformable object.

Next TG meeting will be held during ASTM F08 Committee Week in New Orleans, LA, with the Treadmill TG meeting scheduled for 11/3, 2-4pm.